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11/24/82

EPA PROJECT  
ECOLOGY AND ENVIRONMENT, INC.

MEMORANDUM:      REGION V

US EPA RECORDS CENTER REGION 5



460297

COST CENTER EP151-5

TO:     Mr. Bill Simes

FROM:   Mr. Scott McCone, TATL

VIA:    Technical Assistance Team

SUBJECT: Site Inspection of Danville Plating Company (5-8211-5)

DATE:   November 24, 1982

COMMENTS:

On November 23, 1982, TAT member Sue Ahrendt assisted Bill Simes (U. S. EPA) with a site inspection at the abandoned Danville Plating Company facility. John Shaffer of the Vermilion County Emergency Services and Disaster Agency was also on scene to unlock the facility and act as a safety backup.

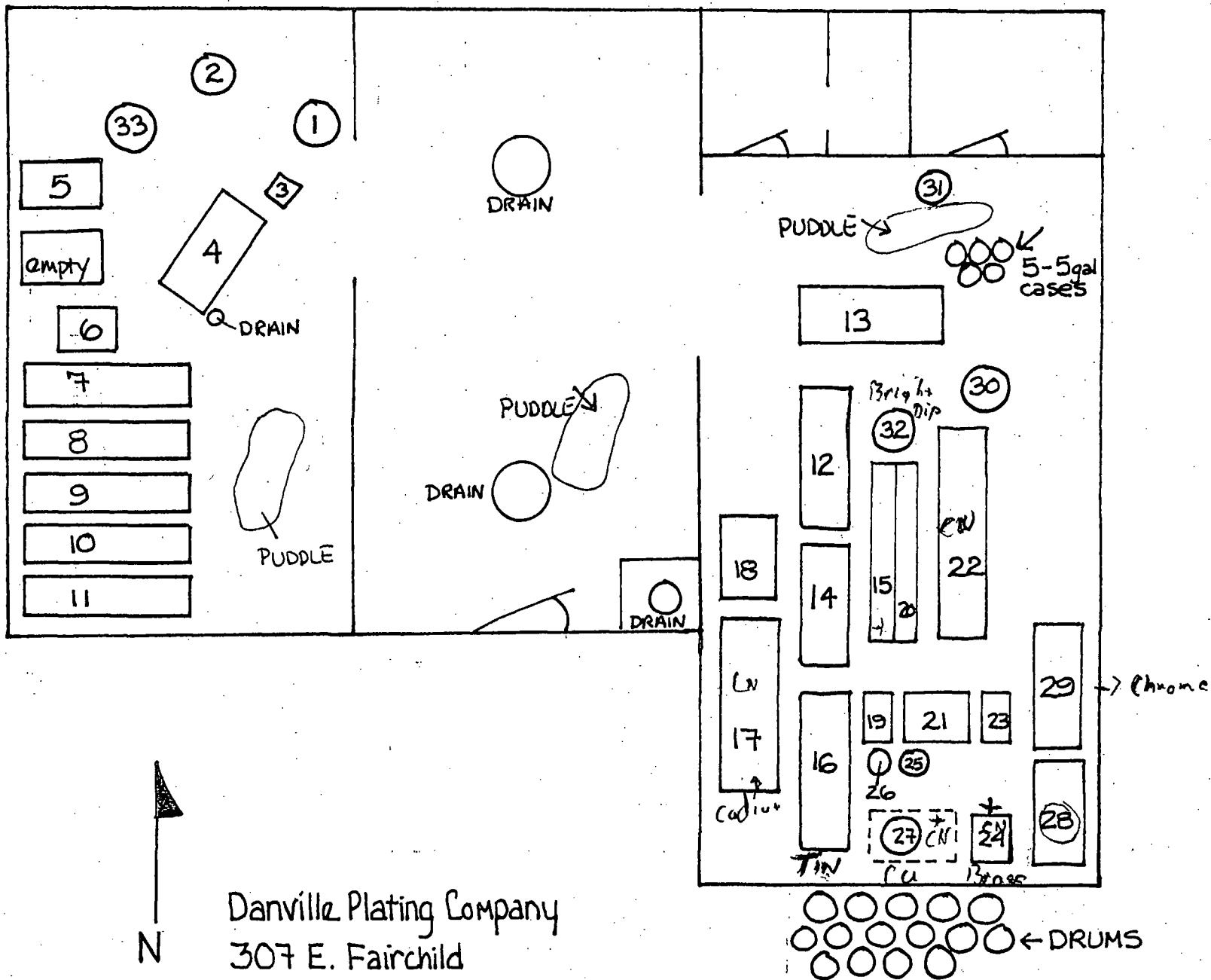
The facility consists of a building with three main rooms. (see sketch) Windows are boarded up and the roof is in poor condition, especially in the center room. Rainwater had leaked through in places and filled vats 12, 14, and 16 completely. An old wooden catwalk surrounds the vats 12-32 in the large room. Other debris is present both in the small rooms and around the vats and drums. There are approximately 20 drums in good condition outside of the facility, which are covered with weeds.

Personnel arrived on scene at 1300. It was raining and the temperature was about 40°F. Level "B" protection was used to enter the building. Drums and vats were numbered with spray paint and cyanide readings were taken using hydrocyanic acid (0-30 ppm) draeger tubes. No cyanide levels above 5 ppm were detected. In the room containing tanks 1-11, a reading of 5 ppm was detected directly above a puddle on the floor. The drain near vat #4 had a cyanide level of 2 ppm. Cyanide was not detected by the draeger tubes in the room containing vats 12-32. High humidity due to rain may have caused interference with the tubes.

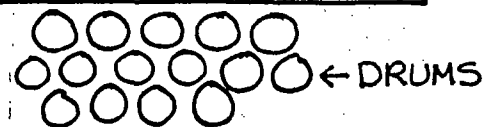
Because the draeger tubes did not indicate cyanide levels greater than the TLV (10 ppm), level "C" protection was used for the second site entry. A pH meter was used to take readings in all accessible vats. Results are shown in the attached table. At 1530 the inspection was completed.

A site safety plan and sketch are attached.

*Sue Ahrendt*  
Sue Ahrendt



Danville Plating Company  
 307 E. Fairchild  
 11-23-82  
 S. Amendt



DANVILLE PLATING COMPANY

DANVILLE, ILLINOIS

(CONT.)

<u>Tank Number</u>	<u>Description</u>	<u>pH (pH Meter)</u>	<u>Cyanide (hydrocyanic acid draeger tubes)</u>
22	Open Vat	0	
23	Open vat	1	
24	Open vat	4	
25	Open bucket	3	
26	Open plastic pail 4" liquid	0	
27	Open drum	4	
28	Open vat containing grease	-	
29	Open vat	7	
30	Open drum	5.5	
31	Small open drum	3.5	
32	Open drum	0	
33	Open vat	0.5	
5-5 gallon cases	Marked nickel brightener (6% by weight dioxane)		
Drain near #4		-	2 ppm
Puddle near #8		6.5	5 ppm
Puddle near #31		9.5	
Puddle near door		7.5	
Outdoor drum		1	ND

DANVILLE PLATING COMPANY

DANVILLE, ILLINOIS

<u>Tank Number</u>	<u>Description</u>	<u>pH (pH Meter)</u>	<u>Cyanide (hydrocyanic acid draeger tubes)</u>
1	Barrel labelled zinc cyanide		
2	Closed can		
3	Open plastic jug	0	
4	Open vat	9	
5	Open vat	5	
6	Open vat	4	
7	Open vat	7.5	
8	Open vat (no liquid)	-	
9	Open vat (no liquid)	-	
10	Open vat (no liquid)	-	
11	Open vat (no liquid)	-	
12	Open vat (full)	7, 10 after stirring	
13	Open vat	0	
14	Open vat (full)	7	
15	Open vat	1.	
16	Open vat (full)	7.5, 11 after stirring	<i>Tin solution</i>
17	Open vat	8	
18	Open vat	6.5	
19	Open vat	2.5	
20	Open vat	0	
21	Open vat	0	



# ecology and environment, inc.

223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415

International Specialists in the Environmental Sciences

## INITIAL REPORT

TAT CASE NUMBER

5-8211-5

Date of spill: Continuous  
Municipality: Danville, Illinois  
Receiving waters: City Storm System  
Tributary to: Vermillion River  
Reported by: Bill Simes  
Telephone: (312) 353-2316  
Address: 530 S. Clark St./Chgo, IL  
Affiliation: U.S. EPA  
State: Illinois

Time of spill: -  
Type of Material: Metal Plating Solution  
Quantity: 21-55 Gallon drums, 17-Tanks  
Source: Site Operations  
Location of spill: Danville Plating Co.  
(street, road, etc.) 307 E. Fairchild  
Cause: Abandonment  
Date of report: November 23, 1982  
Time of report: 1415

## Initial Action

State Notified Yes ☐ No ☐

Coast Guard Notified Yes ☐ No ☒

## Affected Water Supplies

1. \_\_\_\_\_, Time \_\_\_\_\_ ☐ ☒

Report taken by:

Hot Line Sue Ahrendt

## Investigation (on scene) (telephone)

## Persons contacted:

Name of investigator: Sue Ahrendt  
Date of investigation: November 23, 1982  
Station:  
Time:

Name	Affiliation	Telephone
1 Bill Simes	U.S.EPA	(312) 353-2316
2		

Samples: Yes \_\_\_ No x

Report of investigation and recommended containment and cleanup:

I. A. Incident Information: See attached Initial Report Sheet

B. Material Information: See attached Chemical Evaluation Sheet(s)

C. Incident/Material Information Reliability: Good \_\_\_ Fair X Poor \_\_\_

D. Background Information: Extensive \_\_\_ Minimal X

E. Overall Hazard: High \_\_\_ Moderate \_\_\_ Low X Unknown \_\_\_

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II. A. Incident/Site Description

1. Area Affected: Site only, less than 1 acre

2. Surrounding Population: \_\_\_\_\_

3. Building(s): one, 20' x 50'

4. Topography: Flat, urban area

5. Site Plan and Site Sketch Attached: Yes X No \_\_\_

B. Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

C. Site Entry Procedures: See attached Field Information Sheet

D. Emergency Precautions: See attached Field Information Sheet

E. Emergency Information/Telephone/Communications: See attached Field Information Sheet

1. Plastic bags    2. Wash hands    3. \_\_\_\_\_    4. \_\_\_\_\_  
5. \_\_\_\_\_    6. \_\_\_\_\_    7. \_\_\_\_\_    8. \_\_\_\_\_

Date Prepared: 11/22/82



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## Field Information Sheet

### IV. Site Entry Procedures:

Team Size: 2

Station Designation (Name Responsibility) \_\_\_\_\_

Observers \_\_\_\_\_ 2

Special Instructions: \_\_\_\_\_

### V. Emergency Precautions:

Health Hazards: HCN gas

Excavation of Nearby People: Yes \_\_\_\_\_ No X

If yes, How Large an Area? \_\_\_\_\_

Acute Exposure Symptoms (if known): (Cherry Red Venous Blood)

First Aid Instructions for above Symptoms: Remove from area, give oxygen

### VI. Emergency Information Sources:

	Name	Town	Phone (217)	Notified	
				Yes	No
Fire	Danville F.D.	Danville	431-2345		
Police	Danville P.D.	Danville	431-2211		
Ambulance	Arrow				
	Ambulance	Danville	446-4646		
Hospital	Lakeview Med. Center	Danville	443-5221		
Airport	Vermillion County	Danville	443-6182		
Heliport	Vermillion County	Danville	443-6182		
EPA Contact	Bill Simes	Chicago	353-2316	<u>X</u>	
Explosive Unit					
Trauma Center	St. Elizabeth				
List Other Resources	Hospital	Danville	443-5622		

### VII. Emergency Telephone No.:

E & E Regional Office: (312) 635-6560

E & E NPMO Emergency Answering Services: (716) 882-2804,  
881-8151-Pager No.

Dr. Harbison: (501) 370-8263

TAT Leaders Home Phone Number: (312) 639-1858

Other: Safety Manager (312) 824-2979

### VIII. Communications:

Nearest Telephone: Nearby house

Communications Used on Site: Oral

Jerry Kelly

Prepared By: Sue Ahrendt

Date Prepared: 11/22/82





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## HAZARD EVALUATION OF CHEMICALS

5-8210-8

Chemical Name Hydrogen Cyanide

DOT Name \_\_\_\_\_

References consulted (Circle) \_\_\_\_\_

HAZMAT Handbook Chris Merk Index ( ) Aldrich CRC Toxic Safety Manual

### Chemical Properties:

Chemical Formula:	HCN	Molecular Weight:	27.03
Physical State:	Liquid or Gas	Solubility:	Mixes with water
Flash Point	_____	Vapor Pressure:	400 mm @ 9.8°C
Specific Gravity:	0.689 at 20°C	Odor/Odor Threshold:	Data not Available
		Boiling Point:	78°F 25.7°C
		Freezing Point:	8.1°F -13.3°C
		Flammable Limits:	5.6%-40%

faint odor of bitter almonds

### Biological Properties:

TLV: 10 ppm	Grade 4
TLC/TLD:	Human: LD50 Less than 50 mg/kg
	Aquatic: 16 ppm Waterfowl: N/A
	72 hour/Young Bass
Dermal Toxicity:	Extremely poisonous if absorbed through skin or eyes

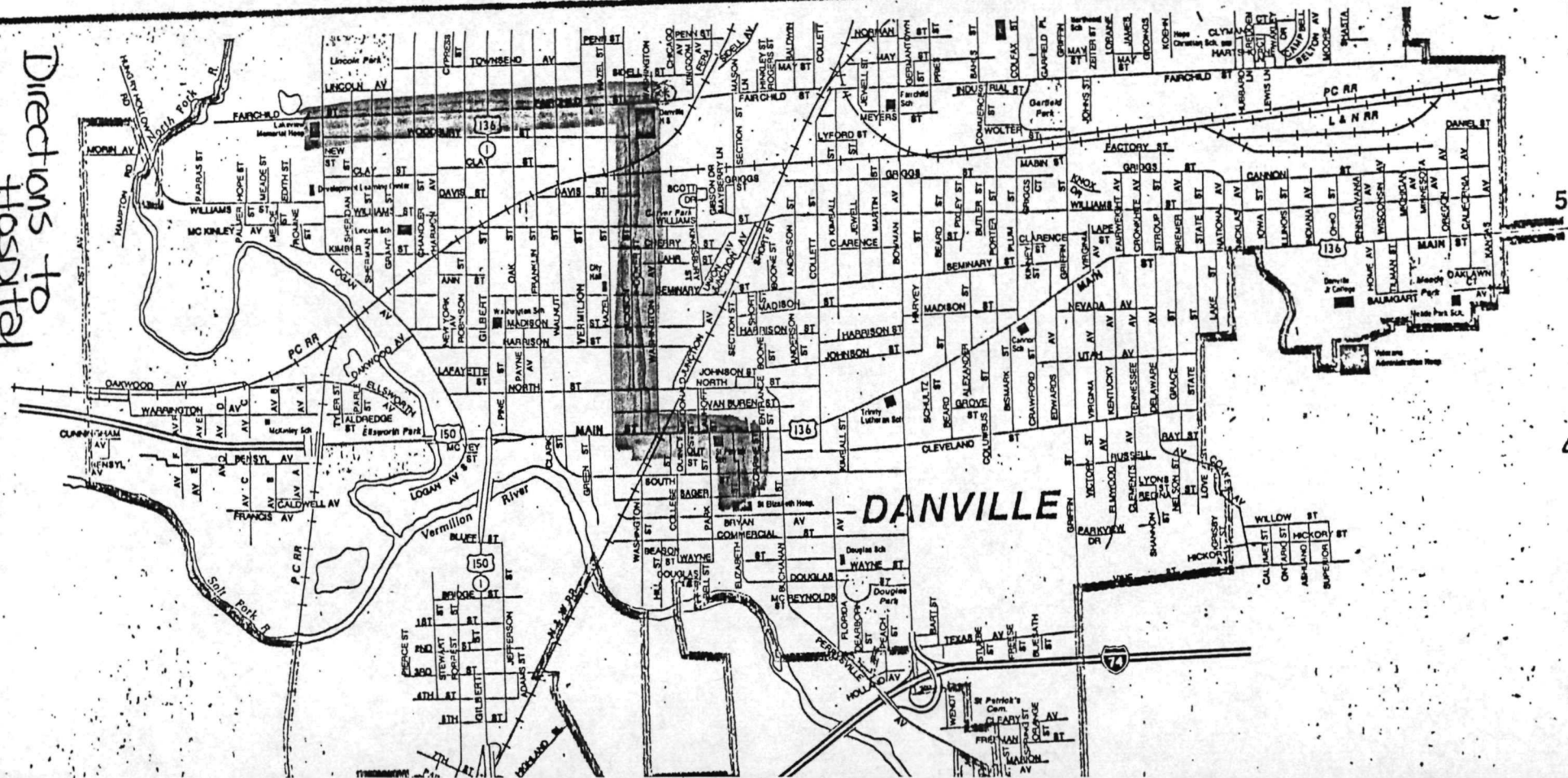
### Cleanup Recommendations:

Do not touch. Prevent accidental ignition. Stop leak and contain spill. Use water spray to reduce vapors. Isolate area until gas has dispersed.

### Health Hazards and Recommendations:

Inhalation - Vapor very irritating and extremely poisonous  
Dermal - See Above  
Remove to fresh air, give artificial Respiration (not mouth to mouth)  
Give O<sub>2</sub>  
Remove contaminated clothing, flush areas with H<sub>2</sub>O, flush eyes  
If swallowed give H<sub>2</sub>O or milk to induce vomit

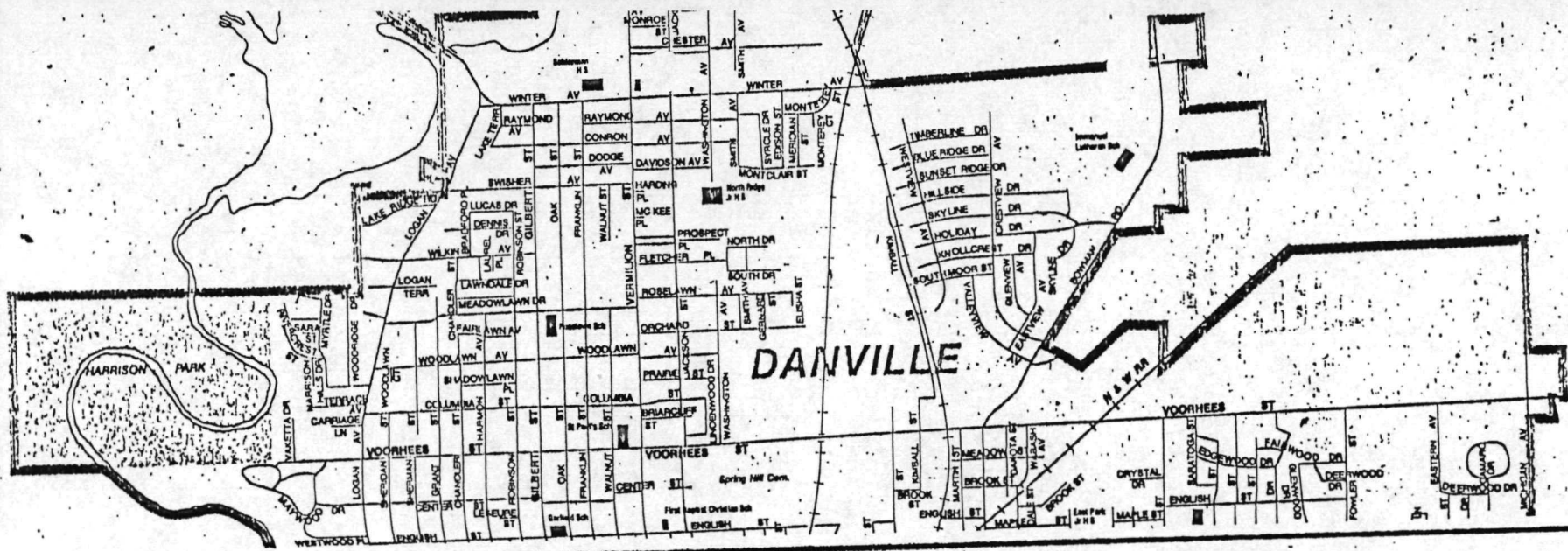
Directions to  
Hospital



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